

Notice of Allowability	Application No.	Applicant(s)	
	10/568,788	ACHILLES, ROY DERRICK	
	Examiner	Art Unit	
	ROBERT E. FULLER	3676	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the Request for Continued Examination filed November 20, 2009.
2. ☒ The allowed claim(s) is/are 1-4,6-21 and 23-38.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| <ol style="list-style-type: none"> 1. <input type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>20091215</u> . 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input type="checkbox"/> Other _____. |
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EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Joseph Walkowski on December 16, 2009.

2. The application has been amended as follows:

In the claims:

- In Claim 1, line 8: the phrase --at a boundary of the region rich in catalyzing material-- has been inserted between "interface" and ", the".
- In Claim 8, line 2: the word "which" has been changed to --wherein the polycrystalline diamond abrasive element--.
- Claim 11 has been amended as follows:

11.(Currently Amended) A polycrystalline diamond abrasive element, comprising a polycrystalline diamond layer bonded to a substrate along an interface, the polycrystalline diamond layer having a working surface opposite the interface and an outer peripheral surface extending between the working surface and the interface, the polycrystalline diamond layer consisting of at least one a region rich in catalyzing material and a region lean in catalyzing material, the region lean in catalyzing material having a ~~at least one region being~~ substantially

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~~annular-in shape portion,~~ adjacent the peripheral surface, commencing at a peripheral edge of the working surface and extending away from the working surface toward the interface but spaced therefrom by a portion of the region rich in catalyzing material, ~~and at least another region of the polycrystalline diamond layer being rich in catalyzing material.~~

- In Claim 12, line 2: the phrases "at least one" and "in the polycrystalline diamond layer" have been deleted.
- In Claim 12, line 3: "region" has been changed to --portion--.
- In Claim 13, line 2: "at least one" has been changed to --the substantially annular portion--, and "regions" has been changed to --region--.
- In Claim 14, line 2: "at least one" has been changed to --substantially annular portion of the--.
- In Claim 15, line 2: "at least another" has been deleted.
- Claim 27 has been amended as follows:

27.(Currently Amended) A polycrystalline diamond abrasive element, comprising a polycrystalline diamond layer bonded to a substrate along an interface, the polycrystalline diamond layer having a working surface opposite the interface and an outer peripheral surface extending between the working surface and the interface, the polycrystalline diamond abrasive layer consisting of ~~at least one~~ a region rich in catalyzing material and ~~at least one~~ a region lean in

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catalyzing material adjacent the peripheral surface, having a substantially annular portion in configuration and extending from adjacent the working surface toward the interface, the ~~at least one~~ substantially annular portion ~~region lean in catalyzing material~~ located between a portion of the ~~at least one~~ region rich in catalyzing material and the peripheral surface, another portion of the at least one region rich in catalyzing material being located adjacent the peripheral surface and between the ~~at least one~~ substantially annular region portion ~~lean in catalyzing material~~ and the interface.

- In Claim 28, line 2: "at least one" has been deleted.
- In Claim 28, line 3: "region of the polycrystalline diamond layer lean in catalyzing material and" has been changed to --portion--.
- In Claim 29, line 2: "at least one region" has been changed to --substantially annular portion--, and the second instance of the word "region" has been changed to --portion--.
- In Claim 29, line 3: "polycrystalline diamond layer" has been changed to --region--.
- In Claim 30, line 2: "at least one" has been changed to --substantially annular portion of the--.
- In Claim 30, line 4: --portion of the-- has been inserted between "another" and "region."

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- In Claim 31, line 2: “at least one” has been changed to --substantially annular portion of the--.
- In Claim 31, line 3: --layer-- has been inserted between “diamond” and “from”.
- In Claim 32, line 2: “at least one” has been changed to --substantially annular portion of the--.
- In Claim 34, line 2: “at least one” has been deleted.
- In Claim 35, line 2: “which” has been changed to --wherein the polycrystalline diamond abrasive element--.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT E. FULLER whose telephone number is (571)272-0419. The examiner can normally be reached on Monday thru Friday from 8:00 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David J. Bagnell/
Supervisory Patent Examiner, Art Unit 3672

12/16/2009
REF